What is claimed:

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- 1. A method of promoting hair growth in a subject, comprising: providing a dermal papilla (DP) cell;
- culturing the DP cell in the presence of a Wnt polypeptide or a functional fragment or analog thereof, and

grafting the cultured DP cell onto the skin of a subject, thereby promoting hair growth in the subject.

- 2. The method of claim 1, wherein the subject is a human.
- 3. The method of claim 1, wherein the DP cell is autologous.
- 4. The method of claim 1, wherein the DP cell is allogeneic
- 15 5. The method of claim 1, wherein the Wnt polypeptide is Wnt 3a.
 - 6. The method of claim 1, wherein the Wnt polypeptide Wnt 3.
 - 7. The method of claim 1, wherein the Wnt polypeptide is Wnt 4.
 - 8. The method of claim 1, wherein the Wnt polypeptide is Wnt 7a.
 - 9. The method of claim 1, wherein the Wnt polypeptide is Wnt 7b.
- 25 10. The method of claim 1, wherein the Wnt polypeptide is recombinant.
 - 11. The method of claim 1, wherein the Wnt polypeptide has been exogenously added to the cell culture.
- The method of claim 1, wherein the DP cell is cultured in the presence of a cell that expresses the Wnt polypeptide.

- 13. The method of claim 1, wherein the cell is cultured in the presence of a Wnt polypeptide.
- 14. The method of claim 13, wherein the subject is a human.
- 5 15. The method of claim 13, wherein the DP cell is autologous.
 - 16. The method of claim 13, wherein the DP cell is allogeneic
 - 17. The method of claim 13, wherein the Wnt polypeptide is Wnt 3a.

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- 18. The method of claim 13, wherein the Wnt polypeptide Wnt 3.
- 19. The method of claim 13, wherein the Wnt polypeptide is Wnt 4.
- The method of claim 13, wherein the Wnt polypeptide is Wnt 7a.
 - 21. The method of claim 13, wherein the Wnt polypeptide is Wnt 7b.
 - 22. The method of claim 13, wherein the Wnt polypeptide is recombinant.

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- 23. The method of claim 13, wherein the Wnt polypeptide has been exogenously added to the cell culture.
- The method of claim 13, wherein the DP cell is cultured in the presence of a cell thatexpresses the Wnt polypeptide.